

化学品安全技术说明书

Safety Data Sheet (SDS)

依据GB/T 16483-2008和GB/T 17519-2013
According to GB/T 16483-2008&GB/T 17519-2013

修订日期Revision date: 20250504
版本号Version: 1.0

1. 化学品及企业标识 Identification

化学品标识 Product identifier

| | |
|----------------------|--------------------------------|
| 产品名称 Product name | 七水硫酸镁 |
| 英文名称 English name | Magnesium sulfate heptahydrate |
| 产品编号 Product No. | - |

企业标识 Enterprise information

| | |
|-----------------------------|---|
| 企业名称 Applicant | 邹平裕星生物科技有限公司 Zouping Yuxing Biotechnology Co., Ltd. |
| 企业地址 Application Address | 山东省滨州市邹平市长山镇杨家村 Yangjia Village, Changshan Town, Zouping City, Binzhou City, Shandong Province |
| 邮政编码 Applicant Post code | 256206 |
| 联系电话 Applicant Telephone | +86-13001528891 |
| 传真 Applicant Fax | - |
| 电子邮件地址 Applicant E-mail | - |

应急咨询电话 Emergency telephone

| | |
|-------------------------------|-----------------|
| 应急电话号码 Emergency telephone | +86-13001528891 |
|-------------------------------|-----------------|

化学品的推荐用途及限制用途 Relevant Identified Uses of the Substance or Mixture and Uses

| | |
|-----------------------------|--------------------------------------|
| 推荐用途 Recommended use | 咨询生产商 Please consult manufacturer |
| 限制用途 Restrictions on use | 无可用信息 No data available |

2. 危险性概述 Hazard(s) identification

紧急情况概述 Emergency instructions

无。
None.

GHS危险性类别 GHS classification

无危害分类
Not classified

标签要素 GHS label elements

| | |
|------------------------------|------------------------|
| 危险象形图 Pictogram(s) | 无危险图标 No symbol |
| 信号词 Signal word | 无警示词 No signal word |

危险性说明 Hazard statements

无。
None.

防范说明 Precautionary statements

预防措施 Prevention
无。
None.

事故响应 Response
无。
None.

安全存储 Storage
无。
None.

废弃处置 Disposal
无。
None.

危害说明 Harm instructions

1.物理和化学危害 Physical and chemical hazards
无。
None.

2.健康危害 Health hazards
无。
None.

3.环境危害 Environmental hazards
无。
None.

4.其他危害 Other hazards

无。

None.

3. 成分/组成信息 Composition/information on ingredients

产品类别：物质

Product property: Substance

| 成分 Component | CAS No. | 浓度或浓度范围 (质量分数, %) Content |
|---|------------|---------------------------------|
| 七水硫酸镁 Magnesium sulfate heptahydrate | 10034-99-8 | ≥ 98 |

4. 急救措施 First-aid measures

急救措施的描述 Description of first aid measures

一般建议

General advice

一旦发生接触，出现不适，请将本SDS出示给急救人员。

Once exposure occurs, discomfort occurs, show this material safety data sheet to the doctor in attendance.

吸入

Inhalation

迅速脱离现场至空气新鲜处。立即紧急就医。

Quickly evacuate the scene to a place with fresh air. Seek emergency medical attention immediately.

皮肤接触

Skin contact

立即脱去污染的衣着，用流动清水彻底清洗。如有不适感，就医。

Immediately remove contaminated clothing and thoroughly clean with running water. If you feel uncomfortable, seek medical attention.

眼睛接触

Eye contact

立即分开眼睑，用流动清水或生理盐水冲洗眼睛至少15分钟。就医。

Immediately separate the eyelids and rinse the eyes with flowing water or saline solution for at least 15 minutes. Seek medical attention.

食入

Ingestion

避免催吐，立即紧急就医。

Avoid inducing vomiting and seek emergency medical attention immediately.

最重要的症状和健康影响 Most important symptoms and health effects

无数据资料。

No data available.

对保护施救者的忠告 Advice to protect the rescuer

确保医护人员了解产品的危害特性，并采取自身防护措施，以保护自己和防止污染传播。

Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.

对医生的特别指示 A special note to the doctor

根据出现的症状进行针对性处理。

注意症状可能会出现延迟。

Treat symptomatically.

Symptoms may be delayed.

5. 消防措施 Fire-fighting measures

灭火剂 Extinguishing media

| | |
|-----------------------|---|
| 合适的灭火剂 Suitable | 水雾、干粉、泡沫或二氧化碳灭火剂。 Water mist, dry powder, carbon dioxide and foam extinguishing agent. |
| 不合适的灭火剂 Unsuitable | 避免使用直流水。 Avoid using direct current water. |

特别危险性 Special hazards arising from the substance or mixture

无数据资料。
No data available.

灭火注意措施及防护措施 Special protective equipment and precautions for fire-fighter

消防员须穿全身消防服，佩戴空气呼吸器，在上风向灭火。尽可能将容器从火场转移至空旷处。喷水保持火场容器冷却，直至灭火结束。收容和处理消防水，防止污染环境。
Firefighters should wear full body firefighting suits, air respirators, and extinguish fires upwind. Try to transfer the container from the fire scene to an open area as much as possible. Spray water to keep the fire container cool until the fire is extinguished. Collect and handle firefighting water to prevent environmental pollution.

6. 泄漏应急处理 Accidental release measures

作业人员防护措施、防护装备和应急处置程序

Personal precautions, protective equipment and emergency procedures

根据液体流动和蒸气扩散的影响区域划定警戒区，无关人员从侧风、上风向撤离至安全区。消除所有点火源，建议应急处理人员戴自给式呼吸器，穿一般作业工作服，戴防护手套。避免吸入蒸气或雾。保证充分的通风。

Designate a warning zone based on the impact area of liquid flow and vapor diffusion, and evacuate unrelated personnel from crosswind and upwind directions to a safe zone. Eliminate all ignition sources. It is recommended that emergency personnel wear self-contained breathing apparatus, general work clothes, and protective gloves. Avoid inhaling steam or mist. Ensure adequate ventilation.

环境保护措施 Environmental precautions

收容泄漏物，避免污染环境。防止泄漏物进入下水道、地表水和地下水。
Collect leaked materials to avoid polluting the environment. Prevent leakage from entering sewers, surface water, and groundwater.

泄漏化学品的收容、清除方法及所用的处置材料

Storage, removal methods and disposal materials of spill

对泄漏区域进行通风。以最方便和安全的方式收集溢出的材料，并将其存放在密封容器中进行回收。然后根据当地法规进行储存和处理。

Ventilate the leakage area. Collect spilled materials in the most convenient and safe manner, and store them in sealed containers for recycling. Then store and handle according to local regulations.

防止发生次生灾害的预防措施 Preventive measures to prevent secondary disasters

无数据资料。

No data available.

7. 操作处置和储存 Handling and storage

操作注意事项 Usage precautions

操作人员应经过专门培训，严格遵守操作规程。操作处置应在具备局部通风或全面通风换气设施的场所进行。穿戴适当的个人防护装备。避免眼和皮肤的接触，避免吸入蒸气。远离火种、热源，工作场所严禁吸烟。使用后洗手，禁止在工作场所进饮食。在进入饮食区之前脱掉受污染的衣服和防护设备。

Operators should receive specialized training and strictly follow operating procedures. The operation and disposal should be carried out in places with local ventilation or comprehensive ventilation facilities. Wear appropriate personal protective equipment. Avoid contact between eyes and skin and avoid inhaling vapors. Keep away from sources of fire and heat, and smoking is strictly prohibited in the workplace. Wash hands after use and prohibit eating or drinking in the workplace. Remove contaminated clothing and protective equipment before entering the dining area.

储存注意事项 Storage precautions

储存于干燥、阴凉、通风处。避免高温和阳光直射。保持容器密封。远离火种、热源。

Store in a dry, cool, and well-ventilated place. Avoid high temperatures and direct sunlight. Keep the container sealed. Stay away from sources of fire and heat.

8. 接触控制和个体防护 Exposure controls/personal protection

职业接触限值 Exposure limit

无数据资料。

No data available.

生物限值 Biological Limit value

无数据资料。

No data available.

监测方法 Monitoring methods

GBZ/T 160.1 ~ GBZ/T 160.81-2004 工作场所空气有毒物质测定（系列标准），EN 14042 工作场所空气用于评估暴露于化学或生物试剂的程序指南。

GBZ/T 160 Determination of toxic substances in workplace (series effective standard) and GBZ/T 300 Determination of toxic substances in workplace air (series standard).

工程控制 Engineering control

作业场所建议与其它作业场所分开。

密闭操作，防止泄漏。

加强通风。

设置自动报警装置和事故通风设施。

设置应急撤离通道和必要的泻险区。

提供安全淋浴和洗眼设备。

It is recommended to separate the workplace from other workplaces.

Sealed operation to prevent leakage.

Strengthen ventilation.

Set up automatic alarm devices and accident ventilation facilities.
Set up emergency evacuation routes and necessary evacuation zones.
Provide safety shower and eye wash equipment.

个人防护设备 **Personal protective equipment**

眼睛保护：带侧护罩的安全眼镜。

呼吸系统防护：空气中浓度超标时，佩戴过滤式防毒面具。紧急事态抢救或撤离时，应佩戴便携式呼吸器。

手部防护：戴橡胶耐油手套。

身体保护：穿防毒物渗透工作服。

卫生措施：立即更换被污染的衣物。受污染的工作服不允许带出工作场所。工作结束时，应彻底洗手、前臂及脸部。确保安全淋浴和洗眼设备在工作场所附近。

Eye protection: Safety goggles with side shields.

Respiratory protection: Wear a filtered gas mask when the concentration in the air exceeds the standard. When rescuing or evacuating in emergency situations, a portable respirator should be worn.

Hand protection: Wear rubber oil resistant gloves.

Body protection: Wear work clothes that prevent toxic substances from penetrating.

Hygiene measures: Immediately replace contaminated clothing. Contaminated work clothes are not allowed to be taken out of the workplace. At the end of work, hands, forearms, and face should be thoroughly washed. Ensure that safety showers and eye wash equipment are located near the workplace.

9. 物理和化学特性 **Physical and chemical properties**

物理和化学特性 **Physical and chemical properties**

| | |
|-----------------------------------|--------------------------|
| 外观与性状 | 固体 |
| Appearance | Solid |
| 颜色 | 白色或无色 |
| Color | White or colorless |
| 气味 | 无气味 |
| Odour | Odorless |
| pH值 | 无数据资料 |
| pH | No data available |
| 熔点/凝固点 | 1124 °C |
| Melting/freezing point | 1124 °C |
| 沸点、初沸点和沸程 | 330 °C at 760 mmHg |
| Boiling point | 330 °C at 760 mmHg |
| 蒸发速率 | 无数据资料 |
| Evaporation rate | No data available |
| 闪点 | 无数据资料 |
| Flash point | No data available |
| 易燃性（固体） | 无数据资料 |
| Flammability (solid) | No data available |
| 爆炸极限[%(v/v)] | 无数据资料 |
| Expl. Limits [% (v/v)] | No data available |
| 饱和蒸气压 | 无可用信息 |
| Vapour pressure (Pa) | No information available |
| 相对蒸气密度（空气=1） | 无数据资料 |
| Vapour density (air=1) | No data available |
| 密度/相对密度（水=1） | 2.66 |
| Relative density (water=1) | 2.66 |
| 溶解性（水） | 710 g/l （20 °C） |
| Solubilities (water) | 710 g/l （20 °C） |

| | |
|---------------------------|-------------------|
| n-辛醇/水分配系数 | 无数据资料 |
| Partition coefficient | No data available |
| n-octanol/water | |
| 自燃温度 | 无数据资料 |
| Auto-ignition temp. | No data available |
| 分解温度 | 无数据资料 |
| Decomposition temperature | No data available |
| 粘度 | 无数据资料 |
| Viscosity | No data available |
| 体积密度 | 无数据资料 |
| Bulk density | No data available |
| 氧化性 | 无数据资料 |
| Oxidising properties | No data available |
| 爆炸性 | 无数据资料 |
| Explosive properties | No data available |
| 分子量 | 246.47 |
| Molecular mass | |

10. 稳定性和反应性 Stability and reactivity

稳定性 Stability

在正常环境下存储和操作，产品稳定。
Stable in normal storage conditions.

危险反应 Reactivity

本产品正常条件下化学性质稳定。
This product is chemically stable under normal conditions.

避免接触的条件 Conditions to be avoided

远离热源和火焰。
Avoid heat sources and flames.

禁配物 Incompatible substances

无数据资料
No data available

危险的分解产物 Hazardous decomposition products

在正常的储存和使用条件下，不会产生危险的分解产物。
Under normal conditions of storage and use, no dangerous decomposition products are produced.

11. 毒理学信息 Toxicological information

急性毒性 Acute toxicity

| 经口 Oral | 经皮 Dermal | 吸入 Inhalation |
|--|--|----------------------------|
| LD ₅₀ > 2,000 mg/kg (大鼠, Rat) | LD ₅₀ > 2,000 mg/kg (大鼠, Rat) | 无数据资料 No data available |

其他 Other

| 毒性终点 Endpoint | 毒性值 Toxicological Information |
|---|----------------------------------|
| 皮肤腐蚀/刺激 Skin corrosion/irritation | 无数据资料 No data available |
| 严重的眼睛损伤/刺激 Serious eye damage/irritation | 无数据资料 No data available |
| 皮肤过敏 Skin sensitization | 无数据资料 No data available |
| 呼吸道过敏 Respiratory sensitization | 无数据资料 No data available |
| 生殖细胞致突变性 Germ cell mutagenicity | 无数据资料 No data available |
| 生殖毒性 Reproductive toxicity | 无数据资料 No data available |
| 致癌性 Carcinogenicity | 无数据资料 No data available |
| 特异性靶器官系统毒性-一次接触 STOT-single exposure | 无数据资料 No data available |
| 特异性靶器官系统毒性-反复接触 STOT-repeated exposure | 无数据资料 No data available |
| 吸入危害 Aspiration hazard | 无数据资料 No data available |

12. 生态信息 Ecological information

生态毒性 Aquatic toxicity

| 组分名称 Component | 鱼类 Fish | 溞类 Aquatic invertebrates | 藻类 Aquatic algae and cyanobacteria |
|---|----------------------------|-----------------------------|---------------------------------------|
| 七水硫酸镁 Magnesium sulfate heptahydrate | 无数据资料 No data available | 无数据资料 No data available | 无数据资料 No data available |

其他 Other

| 毒性终点 Endpoint | 毒性值 Toxicological Information |
|--|----------------------------------|
| 持久性和可降解性 Persistence and degradability | 无数据资料 No data available |
| 生物富集或生物累积性 Bioaccumulative potential | 无数据资料 No data available |
| 土壤中的迁移性 Mobility in soil | 无数据资料 No data available |
| 内分泌干扰特性 Endocrine disrupting properties | 无数据资料 No data available |

13. 处置注意事项 Disposal considerations

废弃化学品 Waste chemicals

应尽可能避免或尽量减少产生废物。将剩余的和不可回收的溶液交给有许可证的公司处理。
The neutralized liquid can be spilled in accordance with current local and national regulations.
The generation of waste should be avoided or minimized wherever possible.

污染包装物 Contaminated packaging

废物包装应回收利用，无法清洁的包装应按与内装物相同的方式处理。
Waste packaging should be recycled, and packaging that cannot be cleaned should be disposed of in the same way as its contents.

处置注意事项 Disposal methods

按照国家和地方相关法规处置。
不得采用排放到下水道的方式废弃处置本品。
Dispose of according to relevant national and local regulations.
Do not dispose of this product by discharging it into the sewer.

14. 运输信息 Transport information

| 运输 Transport | 分类 Classification |
|--|-------------------------------|
| 陆路运输 Land transport (ADR / RID) | |
| 危险货物运输编号 UN Number | 非危险货物 Not dangerous goods. |
| 运输名称 UN proper shipping name | 非危险货物 Not dangerous goods |
| 危险性分类 Transport hazard class(es) | 非危险货物 Not dangerous goods. |
| 包装类别 Packing group | 非危险货物 Not dangerous goods |
| 海运 Marine transport (IMDG) | |
| 危险货物运输编号 UN Number | 非危险货物 Not dangerous goods |
| 运输名称 UN proper shipping name | 非危险货物 Not dangerous goods |
| 危险性分类 Transport hazard class(es) | 非危险货物 Not dangerous goods |
| 包装类别 Packing group | 非危险货物 Not dangerous goods. |
| 海洋污染物 Marine pollutants | 无 No |
| 空运 Air transport (ICAO / IATA) | |
| 危险货物运输编号 UN Number | 非危险货物 Not dangerous goods. |
| 运输名称 UN proper shipping name | 非危险货物 Not dangerous goods |
| 危险性分类 Transport hazard class(es) | 非危险货物 Not dangerous goods. |
| 包装类别 Packing group | 非危险货物 Not dangerous goods |

15. 法规监管信息 Regulatory information

国内物质名录收集情况 Chinese chemical inventory

| 成分 Composition | 现有化学物质名录 China Inventory of Existing | 危险化学品名录 List of hazardous chemicals | 严格限制进出口的有毒化学品目录 Catalogue of toxic chemicals with strict import and export restrictions | 重点监管的危险化学品名录 List of hazardous chemicals under key supervision | 易制毒化学品 List of precursor hazardous chemicals |
|---|---|--|--|---|---|
| 七水硫酸镁 Magnesium sulfate heptahydrate | 列入 Listed | 未列入 Not listed | 未列入 Not listed | 未列入 Not listed | 未列入 Not listed |

16. 其他 Other information

有关修订的信息 Information about the revision

| | |
|-----------------------|------------|
| 编制日期 Creation Date | 2025.05.04 |
| 修订日期 Revision date | 2025.05.04 |

参考 Reference

- [1] 国际化学品安全卡：国际化学品安全卡（ICSC），网址：<http://www.ilo.org/dyn/icsc/showcard.home>
- [2] 国际癌症研究机构IARC，网站：<http://www.iarc.fr/>。
- [3] CAMEO化学品网站：<http://cameochemicals.noaa.gov/search/simple>。
- [4] NLM: ChemIDplus，网站：<https://www.nlm.nih.gov/databases/download/chemidplus.html>
- [5] 美国交通部：ERG，网址：<http://www.phmsa.dot.gov/hazmat/library/erg>。
- [6] ECHA：欧洲化学品管理局，网址：<https://echa.europa.eu/>
- [7] 德国GESTIS-危险物质数据库，网址：<https://gestis-database.dguv.de/>

- [1] IPCS - The International Chemical Safety Cards (ICSC), website:<http://www.ilo.org/dyn/icsc/showcard.home>
- [2] IARC - International Agency for Research on Cancer, website: <http://www.iarc.fr/>
- [3] CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>
- [4] ChemIDplus, website: <https://www.nlm.nih.gov/databases/download/chemidplus.html>
- [5] ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: <http://www.phmsa.dot.gov/hazmat/library/erg>
- [6] ECHA - European Chemicals Agency, website: <https://echa.europa.eu/>
- [7] Germany GESTIS-database on hazard substance, website: <https://gestis-database.dguv.de/>

缩写与首字母缩略词 Abbreviations and acronyms

CAS - 化学文摘社
LC₅₀ - 致死浓度50%

LD₅₀ - 致死剂量50%

EC₅₀ - 有效浓度50%

CAS - Central Authentication

LC₅₀ - Median lethal concentration 50%

LD₅₀ - Lethal dose 50%

EC₅₀ - Concentration for 50% of maximal effect